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**Participate via teleconference*

ACTION ITEMS

#	Action Item	Designee	Status
1	Find out what actions the DOE sites have taken on the QARD Revision 17 (HLW-sites)	DOE – HQ / QA	
2	Collect the QA related documents and ensure they are circulated to the sites for review. Work with Larry Vaughn.	NSNFP – QA/ Don Armour	
3	Identify the NE POC that should also receive the QA documents for review.	DOE QA/ Bob Torres	
4	Schedule a follow on video conference with Ned Larson to discuss the transportation issues. Involve HLW as well. Invite Ned Larson to the next NSNFP Meeting in Washington DC.	NSNFP	
5	Dialog with HQ to reestablish the strategy for transportation.	NSNFP	
6	Interface with the NRC about questions regarding pedigree and participation in quarterly meetings.	NSNFP	
7	Provide the EPRI report on the effectiveness of the cold drying process to Eric Woolstenhulme.	Brett Carlsen	
8	Send the specifications on the 10-year-old interim storage cask to Guy Martin.	Roger McCormack	
9	Send information to Denis Koutsandreas on the current use of the SRS BCT and how much the PEER process will increase throughput.	Jim Werner	

ISSUES

- MOAs may need to be developed to reestablish the relationships between RW, DOE-EM, DOE-NE, Navy, Science, and NNSA.

- The January 2005 QA Audit scheduled for the NSNFP will be in the middle INEEL contract transition.

- We need to determine the tradeoff and costs for using the current casks based on the likelihood of the repository opening in 2010. It may not be more expensive to start on the right foot now with the optimal cask design rather than starting at less than optimal and never getting the cask we need. System integration from DOE-sites, transportation, and the repository is critical.

PATH FORWARD

The next NSNFP Meeting will be scheduled in the April 2005 timeframe.

NSNFP MEETING SUMMARY
TUESDAY, OCTOBER 19, 2004

The information below represents discussion highlights or questions raised during the presentations. Copies of the presentations will be available electronically on the NSNFP Web page after November 15, 2004, at http://nsnfp.inel.gov/program.

Welcome/Introductions (No presentation)
Mark Gardner, DOE-NSNFP

- Mark Gardner, DOE NSNFP Manager, welcomed the participants to the NSNFP Meeting and thanked Dick Blaney for continuing to be our DOE POC, even with the shifting roles at DOE-Headquarters.

Opening Remarks (No presentation)
Dick Blaney, DOE EM/RW

- DOE-HQ is undergoing a new reorganization. They are not organized by waste type or by site location anymore. If you need issues resolved by DOE Headquarters, look to the following three offices organized under the Federal Disposition Options.
  - Logistics and Waste Disposition and Enhancements- Frank Marcinowski III is Deputy Assistant Secretary
    1. Manage Federal Disposal Sites Office – Cynthia Anderson. Includes NTS, Richland, and Interfaces with YMP.
    2. Commercial Disposition Options Office – Christine Gelles. Good complex-wide perspective on SNF and HLW.
    3. Transportation Office – Dennis Ashworth.

- For the past six months, there has been some focus to resolve the issues identified in the SNF Corporate Project Team (CPT).

- Thank you for the reviews on the draft YMP License Application. We appreciate the work the field offices have done in reviewing the document.

Welcome (No presentation)
Joe Price, DOE-RW

- We appreciate the support from the NSNFP on the License Application preparation.

- In addition, we appreciate the support for the site visits with the NRC representatives to familiarize them with DOE-site SNF activities.

National Spent Nuclear Fuel Program Direction
Mark Gardner, DOE NSNFP

- The President's budget went in showing the NSNFP reporting to RW. This was disapproved by the House markup; therefore, the NSNFP remains in EM. We will maintain close contact with RW. Dick will remain the POC for now under Cynthia Anderson.

- Mark Gardner presented the FY-05 Work Activities. Please refer to the presentation on the website.

Repository Program Update (No presentation)
Paul Harrington

YMP Overview

- The DOE YMP Office of Project Management and Engineering has been reorganized under Ric Craun, Office Director. He manages the Project Management and Engineering Groups. Paul Harrington is the Senior Technical Advisor.

- During the first few years, the focus was on Yucca Mountain science not surface facility engineering. We are now doing the engineering analysis for facility design.

License Application (LA)

- The LA went through a technical review in June 2004. A Chapter Review was done during July-August 2004 to resolve comments. These comments were consolidated and a rigorous Management Review was conducted in September 2004, which produced a series of issues that were divided into preclosure and postclosure actions.

Pre-closure Safety Analysis (PSA)

- SAR 1.9, Table 1.9, identifies the PSA process that produced the data that populated this table, but there remain a lot of open issues. One is shielding, which we discussed with the NRC. They agreed that the shielding that is in place and credited would be considered in the event sequence analysis.

Seismic Design

- The seismic design includes analysis of the design basis ground motion 1, 2, and beyond 2. These are modeling seismic values used to bound the uncertainties and reduce the seismic values.
  - DB1 = 0.3 G ground movement, 1000 years. Use this scenario if the dose is in the midrange.
  - DB2 = 0.7 G, 2000 years. Use this scenario if the dose is above midrange.

- Beyond DB2 we look for performance objective compliance, because the values are high at 1.4 G PGA. This poses analytical problems in building analysis, such as how to minimize seismic impacts to the facility and how to reduce the values.

Site Specific Cask

- The Aging Facility will use the TM-32 casks to store bare assembly fuels. The lids will be bolted closed and sent to the Aging Pad. We are not expecting to weld lids on the canisters for this purpose, but there are welded canister systems available.

- We reviewed this design with the NRC and they were not satisfied with the level of detail of the design. They wanted to know the cask design for the Aging Facility and also the associated actions for commercial SNF.

Codes and Standards

- We are relooking at the codes and standards to determine if they are still appropriate for the YMP facilities.

Waste Acceptance Process

- HQ has responsibility for waste acceptance process as it continues to be developed. There was a debriefing meeting last week, but implementation remains unclear.

- Standard contract 961 will be used for the commercial SNF. HLW has a set of forms that are generated as the waste is created. Waste acceptance criteria for DOE-SNF is still being resolved to ensure we have enough information to support the licensing case.

DOE SNF Representation

- Section 1.5.1 of the SAR is being updated as a result of the management reviews. It includes the 34 DOE SNF groups (covering the 650 fuel types), which represents the fuels in MCOs or DOE Standard Canisters. Specific detail of the 650 fuel types is not included.

Surface Facility Design and Operations
Paul Harrington, YMP

- The surface facility design continues to take credit for breach resistance on the MCO and the DOE standard canister.

- The Fuel Handling Facility is approximately 150-ft. X 200-ft., the Canister Handling Facility is approximately 400-ft. X 250-ft., and the Dry Transfer Facility is approximately 450-ft. X 500-ft.

Canister Survivability Report

Brett Carlsen, INEEL

- There are key assumptions used for packaging DOE SNF. We wanted everyone to know what went into the canister survivability report, so if you do the packaging, you can show you are in compliance with the LA.

Post-Closure Criticality Packaging Report

Henry Loo, INEEL

- The information from the source term report needs to be entered into the database. As we start looking at the fuel types in greater depth, more information will become available.

- Information to support the LA has been completed. We analyzed the aluminum fuel assuming it was not processed by melt and dilute.

- The LA is still limited to 70,000 MTHM. This gives us more flexibility to fill the allocation with HLW; however, it could mean that not all the SNF will be accepted.

Site SNF Progress – Hanford

Roger McCormack, Fluor Hanford

- Fuel pieces or scrap are the result of corrosion and are loaded into MCO scrap baskets. We dump a can that has scrap into a sieve that separates the material by size. The larger scrap goes into MCOs and into dry storage. Anything less than ¼" is considered sludge and will be disposed as such.

- We are done with the bulk of the MCO loading effort. We assume we will recover some additional small quantities of fuel in the sludge removal process. Those pieces will go into MCOs, which could result in approximately 4 additional MCOs.

- Pressure, temperature, and sampling for hydrogen are being monitored on the MCOs. They are stored at a slightly elevated temperature than what are in the vault.

- We are still getting support for packaging into standard canisters. It is not a major effort and is scheduled for operations around 2009.

- HLW supplemental storage is the real driver for shipments to YMP. Getting as much material out of the CSB is the driver to allow surge storage capacity for HLW.

Site SNF Progress – SRS

Randy Ponik, DOE SR

- Reactor Basin for Offsite Fuel was closed this summer. It is in a cold, dark, and wet condition.

- The current remaining basin is the L- Basin.

- The graph in the presentation does not assume the receipt of SNF destined for the INEEL. However, the SRS does have the capacity to receive SNF destined for the INEEL, if needed.

SRS HLW (No presentation)

Tom Gutmann, DOE SR

- The SRS Waste Disposition Program includes all SRS wastes, such as LLW, MLLW, and HLW.

- We originally projected the generation of 6000 HLW canisters, but we are now able to fill up the canisters and increase our waste loading so our projected canisters should be about 5060. Our accelerated cleanup plan has an identified end state of 2019. We will start shipments in 2010.

Site SNF Progress – INEEL

Ron Ramsey, DOE ID

- Commercial dry storage casks are being stored on pads at the INEEL. This fuel is in a package that can't be transported to YMP as is. The casks are meant to be stationary.

- EBR-II sodium-bonded SNF is supposed to be shipped to ANL-W for treatment.

- Fermi SNF will also have to be treated.

- The DOE SNF CPT is concerned with the treatment of these sodium-bonded fuels and would like to ship them as is. They have asked for further evaluation. The sodium-bonded fuel has potential RCRA impacts.

Site SNF Progress – ANL-W

Jim Werner, ANL-W

- There are facilities at ANL-W that can store the EBR-II fuel from INTEC, but ANL-W is limited on how much can be received.

- If FFTF SNF is transferred from Hanford, ANL-W can potentially start processing the material around 2007.

EM HLW Corporate Project Team Report (No presentation)

Joel Case, DOE ID

- The HLW Corporate Project Team (CPT) no longer has a HLW steering group.

- The highest risk program EM has is with HLW. The HLW CPT looked at the life-cycle cost for the three main sites.

INEEL

- The INEEL has 4400m^3 of HLW. We looked at building a vitrification plant, but we now want to retrieve the HLW with little processing, package it, and ship it to the repository. This is the current baseline for calcine and from the HLW CPT and risk standpoint, this was the best option.

- We assume the liquid waste meets the TRU WAC and can be processed. The plan is to treat it and send it to WIPP. Any type of waste form that is stabilized in solid form, not liquid, can be sent to WIPP.

ORP

- The Office of River Protection – Waste Treatment Plant is under demonstration construction with completion in 2007. Two low-activity waste smelters will separate the cesium.

- There is not enough room in Yucca Mountain for the number of expected HLW cans.

- We cannot resolve a tank closure until we resolve the waste isolation issue. The House negotiated some language that passed last Thursday. The Secretary can make the determination. There is a 10CFR61 limitation and it also must meet performance requirements.

- We are really focusing on minimizing what we send to Yucca Mountain.

- There is a disagreement about who is going to pay for the disposition West Valley glass. We take the position that they have to pay the repository fund. It is stored at West Valley waiting for a decision.

Quality Assurance Program Changes and EM/RW Oversight Activities

Bob Torro – Marlin Orsman

- Revision 17 of the QARD supported the LA. We needed to decouple the QARD from other parts of the RW Program

- HLW Programs froze to a specific version of the QARD.

- There is a process in place for assessing impacts to the SNF Program from revisions to the QARD, but we are not sure there is a process for HLW to do impact letters for QARD revisions. HQ QA to find out what the sites have done on the impact analysis from HLW and SNF.

- Once the Yucca Mountain site starts up, the QARD does not apply and the Waste Custodians QA Requirements Specification (WCQARS) will apply, which is based on Rev 14. WCQARS is under development.

- The Augmented QA Program (AQAP) applies to RW activities that are not Part 63 regulated by the NRC.

- The Cask Acquisition and Fleet Maintenance Facility QA Program (CQAP) concerns the procurement and oversight of cask acquisition and fleet maintenance programs. It is currently under development.

- Site review of the draft WCQARS before it is issued would be helpful. Site review of Rev 17 QARD would also be helpful to see if there is anything missing.

- The January 2005 evaluation scheduled for the NSNFP will be in the middle INEEL contract transition.

WEDNESDAY, OCTOBER 20, 2004

CPT/Subproject Team Reports (by teleconference)

Christine Gelles

- With the recent changes in the DOE Office of EM, it is uncertain if there is functional responsibility to carry the corporate knowledge forward that the CPT provided.

- The CPT will continue to exist and will preserve the complex-wide perspective. This will provide good leverage to continue to champion the NSNFP. There was no change to the PM for the SNF CPT; however Christine Gelles will not be able to devote full time to the CPT. Some organizational changes will be needed. Also, we need to replace the previous representatives for Idaho and Hanford who have moved to other areas.

- Paul Golan (Acting EM-1) does not want us to default to the safe storage case. He wants to try to proceed on a duel track to baseline a long-term storage case based on 2025 and to also proceed on shorter-term case based on repository opening on 2010.

- We are getting the information on the Global Threat Reduction Program schedule. We understand that the extension is temporal and they don't think it will increase the total volume of SNF. They are just trying to accelerate the shipments and not add to the inventory. However, we don't know what SNF is coming from where. We did not expect to receive FRR SNF from countries such as Italy, Israel, Pakistan, or Mexico. They have not provided us the details to know what the impacts are to the L-Basin capacity.

Safeguards & Security (By teleconference)

John Vlahakis

- We looked at material that is attractive within a canister or within a fuel. If a canister had a certain amount of fissile material, it was more attractive and at a higher risk. We looked at theft for the production of a nuclear explosive device. This is a complex problem relative to sabotage where you can use almost anything to make a dirty bomb.

RW Transportation Planning Update (By teleconference)

Ned Larson

- We are tasked with procuring the infrastructure needed to move the SNF.

- RW is planning to use existing casks for SNF shipments. A new basket will need to be designed and the cask recertified. This will make it cheaper and easier to get through the NRC approval process.

- We just completed the cask capability assessment reports and hope to publish the draft contract for the basket in January. With comments from vendors, we plan to issue the final RFP in May or June and award the contract before end of FY-05.

- Existing casks can hold 4 to 5 canisters depending on the configuration of the HLW basket design. We are using the work the NSNFP did to develop the systems. However, we must have a basket modification for an existing cask and the vendors will get the certificates and maintain them. The casks have a 6-ft. internal diameter and we should be able to get 3-4 canisters in one cask.

- There is a concern about the ability to load the cask with the information currently available on DOE SNF. This is an EM issue with cask loading and EM will have to develop the data needed to show compliance with the cask certificates. RW will work with EM to ensure the greatest flexibility in the cask certifications.

- RW originally thought we would need 130 casks; about 20 for DOE. DOE will not be waiting for the casks. We will settle on one for the DOE side. We would like to fully standardize on one model for everyone.

- The Integrated Acceptance Schedule (IAS) is the official one transmitted to RW by EM. The goal now is to make sure all fuel and HLW is covered by a cask design. The numbers of casks will not be determined until 2007.

- RW will participate in the next NSNFP meeting in Washington, DC. The NSNFP will set up a follow-on videoconference to discuss transportation issues with the DOE sites.

- The original NSNFP cask design was for 66-in. diameter to accommodate better packing. The current commercial designs are 60-in. diameter. The length will be extended 15-ft. to accommodate the longer canisters.

- RW will look at new casks beyond 2015, but they want to look at current casks today to ensure they are operational by 2010. We've talked about systems integration and handling capability at the repository and how that can be critical issue. These issues are not lost on the transportation group. This is a timing issue and similar to other issues they are dealing with in the surface facility designs.

- NSNFP will look at preparing a path forward on cask designs and loading issues. It will lay out the path forward for our fuel loaded into the standard canister and then into the cask.

- Dialog with HQ on establishing a strategy for providing transportation for shipments. The challenge is how to be clever in developing the CofC. It is important for the sites to review the CofC.

Waste Acceptance Criteria (By teleconference – no overheads)
Chris Kouts/Dave Zabransky

- RW has reviewed litigation settlements relative to the repository delayed opening.
  - Exelon settled for $80 M a year, but they had to give $40 M in refunds. This terminated 3 of the lawsuits against the department
  - This is a landmark case for DOE because this is one settlement that deals with perpetuity. Exelon will provide vouchers for the costs incurred due to the lack of a repository as of 1998. If we don't have a repository open until 2010, this is going to cost DOE around $300 M to Exelon.

- RW looked at the contractual process and the time frames with the Waste Acceptance Plan.
  - Requests have come in to the department for shipment schedules.
  - We requested delivery commitment schedules for first 10 years of operations from the utilities. Then we determine whether to accept the schedules. Commercial utilities can negotiate with each other to trade places on the schedules and we should be able to support and respond to these trades. Then we get a final delivery schedule one year prior to movement. About 60 days prior

to acceptance, we will get the final schedule of what fuels will be moving. We can lay those dates over the development of the repository.

- The sites need to update the IAS. Then RW can compare it to the repository-planning baseline to determine if any changes are needed to the schedule.

- The RW/EM MOA will hopefully be updated in the near future to reflect the current organization and resolve some of the QA issues.

- The last meeting with the NAS on the 10,000-year standard, developed options for the EPA to pursue. Options will not be finalized until later. The issues that formed the basis for the EPA standard were taken out of context. We should have more information after November 2.

- On June 30 the DOE certification Licensing Support Network (LSN) was challenged by state of Nevada. We need to review the materials in the LSN. The NRC has to finish indexing our documents. We cannot certify until then. The department is now appealing the order to wait for certification until after indexing.

EM Canister/MCO Drop Test Results

Tom Hill, INEEL

- If nothing deformed in the canister during a drop event, we would be within the ASME code. We did our analysis under alternative techniques for peak strain. At 50 to 60 % we don't see a rupture or breach of the canister containment.

- The canisters are being designed to the ASME Code and will be N-stamped. The code allowance is zero deformation for a pressure vessel since they are designed to continue in service. The canisters are not pressure vessels designed for continuous service, thus the ASME Code allows for analytical techniques that consider deformation that exceed ASME Code allowable.

- Even with these drops, you would put the canister in the waste package and weld it shut. There is no credit taken for the canister after it is loaded into a WP.

- Both ends of the canisters are designed with a skirt that allows lifting.

- Enough full-scale drop tests have been done to validate our techniques and models. It should be sufficient to do modeling without for further full-scale drop tests.

- We have been testing 316L and 304L base materials with dynamic loading to validate the material performance under 20% strain.

Advanced Neutron Absorber Development Ni-Gd Poison Status

Bill Hurt, INEEL

- We are working a code case vs. a blanket release for the ANA. The code case is a very narrow definition for use.

- Spent fuel storage in a specific configuration is easier to get through approvals. We only need absorbers for storage and structural configuration and then only until it gets into the mountain.

Emerging Issues for NSNFP

Phil Wheatley, INEEL

- Licensing and design and waste acceptance are areas that the NSNFP is keeping coupled.

- Communication with the NRC should resolve any issues on DOE SNF. When we meet with the NRC, their level of understanding of DOE SNF increases.

- There is only one official IAS. It was issued in 2001 and formally transmitted to RW in a letter. The IAS is generic planning information and discusses SNF and HLW canisters. It is an internal working document that EM and RW did not approve. It has not been updated because direction from EM has not been received.

- RW developed a system simulation capability and can simulate the entire waste stream from utility to packaging to receipt at Yucca Mountain. They are using the IAS from 2001 for inventory. We need to continue to interface with them and get them the latest information. We are keeping an eye on transportation with Mike Tyack in DC.